

Confederated Tribes and Bands  
of the Yakama Nation

Established by the  
Treaty of June 9, 1855

Brian J. Brown  
Assistant Regional Administrator for Hydro  
National Marine Fisheries Service  
525 NE Oregon Street, Suite 500  
Portland, Oregon 97232-2737

Dear Mr. Brown,

The Yakama Nation has reviewed the "Conservation of Columbia Basin Fish, July 27, 2000" and the associated Draft Biological Opinion for the Operation of the Federal Columbia River Power System Including the Juvenile Fish Transportation Program and the Bureau of Reclamation's 31 Projects, Including the Entire Columbia Basin Project" (the BiOp).

Attached are our comments to these documents, which focus on several key areas of concern:

**Secretarial Order #3206 on "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" emphasizes the importance of government-to-government consultations with the Tribes when agencies are making ESA decisions that affect Tribal rights, and requires working with the Tribe on many levels.** In the Final Biological Opinion, NMFS must specify clearly that consultation with the Yakama Nation will occur for all decisions and actions that may potentially affect our Treaty rights. The Yakama Nation looks forward to participating in the many challenges presented in the BiOp.

**The hydro-system is given a "jeopardy" ruling by NMIFS, but the BiOp requires few changes in system operations and relies too heavily on "offsite mitigation".** The Final BiOp must make great strides from this Draft BiOp in demonstrating that everything that can be done in the Federal Systems, will be done to minimize mortality to fish and degradation to all aquatic resources. The Yakama Nation supports the notion that it is appropriate to seek substantial improvements in habitat conditions and modifications to various hatchery operations, but given the considerable level of uncertainty in being able to accomplish these things in a timely manner, the federal government must not lessen its commitment towards finding solutions within main-stem operations.

**It is impossible to determine whether the off-site mitigation defined for the Reasonable and Prudent Alternative (RPA) is adequate to offset impacts of the hydro-system.** In the Final BiOp, NMFS must include a quantitative assessment of the survival benefits of the RPA to determine whether the "bar is set high enough" to recover listed stocks in a timely manner. Additionally, NMFS must address other measures that will be implemented if, after the 5- and 8-year reviews, assessments fail to clearly demonstrate that recovery is in fact occurring.

**Implementation of the RPA is too uncertain, in terms of action agency authorities and/or commitment of funds.**

The Final BiOp should include only those components of the RPA that the action agencies can implement under their various authorities and to which they can commit identified funds. For each of these components, NMFS must clearly illustrate when various actions will occur in each of the sub-basins, and their expected contribution to relieving a

"jeopardy" call on the Federal system(s) operations. NMFS must clearly define the concept and expectations of "reasonable progress".

**The BiOp represents an unfair allocation of the conservation burden.** Treaty case law requires that all other actions that can be taken must be taken before imposing involuntary restrictions on treaty fisheries. NMFS must insure that the habitat and hydro components share an equal conservation burden.

**Harvest and hatchery measures as presented in the BiOp and RPA should not be credited against the hydro-system jeopardy ruling.** Selective fisheries should not be credited as conservation tools, nor should funding hatcheries not managed to increase natural stock spawning. Benefits of selective fisheries may be exaggerated, especially if one of the consequences is to *again* displace current tribal fishers from present or usual and accustomed fishing areas. NMFS should be strongly encouraging hatchery operations that produce fish suited to spawning in the wild, such as the Tribes' program at the Cle Elum facility.

**NMFS should clearly display a presumptive path to breaching of the Snake River Dams.** NMFS must continue to evaluate, in a meaningful way, the feasibility and means for breaching the Snake River dams over the next 5-years, so that if it is determined that the RPA cannot relieve the federal hydro-system of a "jeopardy" call, then we will be in a position for dam removal by the end of the 8-year cycle for evaluation. Additionally, NMFS must clearly define the evaluation and reporting methods that will be used in the 5- and 8-year evaluations. We must avoid determinations using vague information that will only serve to confuse and destroy the overall goal of restoring our environment and rebuilding these critical fish stocks.

The Yakama Nation looks forward to the Final Biological Opinion and trusts that NMFS will incorporate our comments into this important document. Please note, that we also incorporate into this letter, by reference, comments submitted to you by the Columbia River Inter-Tribal Fish Commission, also in consideration of the said Draft Biological Opinion. Also attached is a supplemental document titled "Talking Points for Tribal /Federal Meeting, January 25, 2000". Please consider the comments contained therein as relevant to the position of the Yakama Nation with respect to this Draft Biological Opinion.

Sincerely,

Randy Settler  
Tribal Council  
Fish and Wildlife Committee

Comments from the Yakama Nation concerning the "Conservation of Columbia Basin Fish, July 27, 2000" and the associated Draft Biological Opinion for the Operation of the Federal Columbia River Power System Including the Juvenile Fish Transportation Program and the Bureau of Reclamation's 31 Projects, Including the Entire Columbia Basin Project" (the BiOp).

## Introduction

The Yakama Nation supports the underlying concept behind the development of this draft Biological Opinion (BiOp); that being to successfully protect and recover Columbia Basin salmonid stocks will require an unprecedented level of coordination and support from all federal agencies within the Basin. However, the Yakama Nation does not believe this plan will work as stated and we are very reluctant to endorse this proposed federal action until a much greater level of detail is provided and federal commitment is accomplished. The primary reasons are:

- the proposals and recovery standards within the documents are too vague,
- there is little indication that the proposed changes can be initiated by the action agencies in a timely manner,
- there is significant uncertainty that the federal government will fund the proposals to support the commitment as needed, and
- because of the high degree of uncertainties listed above, it is reasonable to conclude the proposal is fundamentally not legal, under the conditions outlined in the Endangered Species Act, for NMFS to determine this action will avoid "jeopardy" to the listed species.

The following are specific comments directed towards seven major areas of concern:

- 1) The Yakama Nation is very concerned that NMFS is trying to dictate that tribal consultations on hydro actions must occur through the Columbia River Basin Forum. We do not agree that this Forum is either the best or the appropriate forum for consultation to occur.**

*Solution: Consultation process must be defined by the needs of the individual tribes.*

The Action Agencies do not understand how a government-to-government consultation should occur. Section 9.5.2.5 of the BiOp recognizes that the Secretarial Order #3206 on "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" emphasizes the importance of government-to-government consultations with the Tribes when agencies are making ESA decisions that affect Tribal rights, and requires working with the Tribe on many levels. The BiOp then goes on to say "*Discussions at the policy level are also important in Tribal consultations and may occur through direct communications with Tribes or through the policy level forums such as the Columbia River Basin Forum.*" During technical staff level discussions with NMFS on Oct. 3, 2000, the YN was given the impression that participation in the Forum was the only method to ensure that tribal concerns about the hydro system were addressed.

This is unacceptable; the Yakama Nation (YN) has already discarded the Forum as a reasonable vehicle for consultation. Furthermore, consultations are not "discussions" with "other interested publics," the unique and distinctive political relationship between the United States and Indian tribes is defined by treaties, statutes, executive orders, judicial decisions, and agreements, and differentiates tribes from other entities

that deal with, or are affected by, the federal government. This relationship has given rise to a special federal trust responsibility, involving the legal responsibilities and obligations of the United States toward Indian tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights.

The consultation process must be worked out with each sovereign Tribal government. The first principle of the Secretarial Order provides, "To facilitate the government-to-government relationship, the Departments may coordinate their discussions with a representative from an intertribal organization, if so designated by the affected tribe(s)," but ultimately, it is the Tribe that defines a government-to-government consultation.

The Yakama Nation looks forward to a continuation of the consultation process with the NMFS. It is important to note that we expect consultation will occur at all levels for decisions and actions that may affect our treaty resources. This intention should be clearly stated in the Final Biological Opinion. Because it can be expected that these future consultations will be time consuming, particularly at the staff level, NMFS should also propose and anticipate providing annual funding to affected Tribes for their participation.

Other important areas for Tribal participation include project implementation, administration and monitoring. In 1996, the four Columbia Basin Treaty Tribes developed their "Tribal Recovery Plan" (WyKan-Ush-Mi Wa-Kish-Wit). This Plan has been, and/or is currently being updated by the four Tribes. The Yakama Nation strongly encourages NMFS to incorporate this Plan as a cornerstone within the Final Biological Opinion, and direct the needed resources to the Tribes to fully implement its components.

**2) The hydro-system is given a "jeopardy" ruling by NMFS, but the BiOp requires few changes in system operations and relies too heavily on "offsite mitigation".**

*Solution: NMFS should emphasize survival improvements at the dams and require refinements in fish passage.*

NMFS' staff claims that this draft BiOp represents everything that can be done with the current hydrosystem to recover listed species. Upon review of the document, however, it appears that the BiOp measures are essentially status quo operations for flow, spill, main-stem habitat improvement and capital construction measures to bring the FCRPS into compliance with Clean Water Act Standards. Within the Final BiOp, the action agencies must be fully engaged in the development and implementation of the Columbia and Snake River dissolved gas and temperature TMDLs currently being developed by the EPA and the States. Additionally, the action agencies should be required to engage all stakeholders regarding dam operations. This would include working with Idaho Power to install selective withdrawal devices at Brownlee Dam to provide cooler water to the river.

The action agencies should be required to use state and tribal water quality standards to trigger emergency measures to reduce exposure of fish to high temperatures at all dam facilities. These agencies must also be required to implement, as quickly as possible all measures that substantially reduce total dissolved gas levels so that spill for fish passage can occur without being impaired from excessive gas conditions.

It is not determined in the draft BiOp how the measures outlined will be funded. A number of capital construction projects at the dams for fish passage are prescribed that will require substantial budgets appropriated by Congress under the Water Resource Development Act. At recent System Configuration

Team meetings, the Corps and NMFS staffs have speculated that Corps' capital construction budgets over the last three years of about \$70-75 million per year would have to be nearly doubled to pay for the measures in the draft biological opinion. It is uncertain whether Congress will appropriate these funds, but given Congress' past record, it is unlikely. A more direct and certain approach to improve fish passage survival and main-stem habitat and water quality would be to restore a normative hydrograph and provide controlled spill during the entirety of fish passage.

Flood Control - The Action Agencies must strive in all ways to bring the Columbia River flows back towards historic conditions. Seasonal flow targets, that are often missed, do not provide the habitat or migratory conditions necessary for salmon and other anadromous fish stocks.

The BOR and Corps should reexamine flood control rule curves and "carry over" water for all federal storage projects in the upper Snake Basin. Together, these agencies have flood control authority for 3.368 MAF of active water storage. Current management retains much of the carry-over storage until November and December when this storage is released for flood control. Management should be modified to release water in the late summer and fall to assist salmon migrations.

NMFS should require BOR to examine water spreading at all basin projects under their authority, and curtail all unauthorized use of water by 2003. For example, the Columbia Basin Institute (1994) identified 800-1000 kaf of the 2.8 MAF being diverted by the Columbia Basin Irrigation Project as illegal or wasted withdrawals by irrigation districts.

BOR-based irrigation activities are a major impediment to meeting NMFS' flow objectives. None of the RPA actions prescribed for BOR require the agency to do anything that will result in more water in the Columbia River; rather, NMFS merely requests that BOR conduct several evaluations, submit reports, and pursue obtaining cooperative agreements with water users and states. See pp. 9-50 through 9-54. Such vague and inconsequential RPA actions contribute nothing towards achieving the stated objectives of the BiOp, let alone satisfying the ESA's requirements.

Measures to improve direct passage survival are needed but other aspects are also necessary for recovery.

These include restoring life history diversity, ecological integrity, main-stem habitat and improving water quality parameters. The need for these is clearly emphasized in *Return to the River* (Williams et al. 1996), the Independent Scientific Advisory Board's *Review of the Corps of Engineers' Columbia River Fish Mitigation Program* (NWPPC 1999) and in Reiger et al. (1989).

Physical performance standards should include main-stem habitat quality (i.e.: increases in riparian and channeled habitat, increases in invertebrate production), fish passage efficiency measurements over dams (using hydro-acoustic and radio telemetry methods), and other physical measurements at dams (i.e.: reducing power peaking). These must be clearly described and included with biological performance standards as objectives that must be met to achieve recovery.

The foundation for river operations for the next year should be decided by August 1. This is the date for the beginning of the next water year and is also the date that non-power provisions under the Pacific Northwest Coordination Act are finalized. The plan should be refined using ENSO diagnostic tools to predict "La Nina" and "El Nino" and related events and when the water supply forecasts are available on January 1 of the migration year in question.

The BiOp must address measures to: a) abate high levels of dissolved gasses, b) reduce water temperature in the fish-ways, c) screen or improve the by-pass systems to exclude juvenile fish, and d) stop barging fish under conditions that subject them to excessive water temperatures.

The Corps has placed a lower priority on maintaining adult fish-ways and appears willing to risk complete failure of certain fish-ways that have not been maintained for several decades. Funding to retrofit and improve adult fish-ways remains extremely limited as the Corps and NMFS place higher priorities to install and maintain new juvenile screen bypass systems.

**3) It is impossible to determine whether the off-site mitigation defined for the Reasonable and Prudent Alternative (RPA) is adequate to offset impacts of the hydro-system.**

*Solution: NMFS must include a quantitative assessment of the survival benefits of the RPA to determine whether the "bar is set high enough*

NMFS proposes that the "action agencies" (Corps of Engineers, BPA, Bureau of Reclamation) identify and fund a set of measures in the RPA that is intended to offset hydro-system mortalities. NMFS presents no analysis and acknowledges that there is no good way to determine whether the cumulative effects of measures in the RPA, if implemented, would lead to the recovery and de-listing of listed species. NMFS proposes to monitor implementation and effectiveness of RPA measures at 1, 5, and 8 years.

The RPA amounts to little more than a "wish list" of possible measures that could produce survival benefits for salmon. There is no assessment of the expected increase in survival for any proposed measure, nor is there an assessment of whether the cumulative increase in survival of all measures would meet or exceed the mortality levels imposed on salmon populations by the federal hydro-system. Since there are considerable questions regarding the authorities and funding needed to implement measures in the RPA, the tribe has very little assurance that proposed measures will have the effect of reversing declines in salmon abundance.

Clear standards for recovery success are not defined in the BiOp, nor are the means by which we can measure if progress/success is achieved. NMFS needs to clarify the process it will use to determine whether measures in the RPA are producing "reasonable progress" toward reversing population declines. This process should, at a minimum, describe the following:

- How NMFS will determine what types of activities will provide significant and /or measurable results?
- What type of monitoring techniques will be used to indicate the degree to which RPA measures are implemented and effective in rebuilding stocks.
- How much money or effort needs to be committed to compensate for the hydro-system "take".
- The set of fall-back actions if reasonable progress towards recovery is not achieved within a reasonable time (5-8 years)

Performance Standards - Standards fail to address delayed mortality and life history diversity. Specific measurements should be tied directly to physical, chemical and biological monitoring. Measurements must include measurements of smolt-adult ratios, stock fitness (spawner success, distribution and size at spawning) and monitoring main-stem habitat health, such as primary and secondary production.

The efficacy of this draft opinion is highly dependent upon the details contained in the operating agencies one and five year plans, yet they are not presented in this draft opinion for review and comment. Instead, they are given ex post facto status, and tribes are left to guess what specific measures the operating agencies will engage in and how effective they will be to meet the performance standards. The term "**steady progress**" is left undefined, and is completely at the subjective interpretation of the federal government.

The Yakama Nation agrees with a three-tiered approach to performance standards. Such standards could be useful to measure short-term survival improvements in the period leading up to potential Snake River dam removal. We are, however, deeply concerned that the draft's current standards are either too vague, too weak, or simply inadequate to provide listed salmonids with adequate protections.

For example, the concept of a programmatic performance standard is warranted. However, as set forth in section 9.2, the BiOp omits any specific description of what the agency intends such a standard to be. The draft merely states that this performance standard will exist. The draft does not state whether NMFS will consider the standard met by implementing one, ten, or all of the specific actions laid out in a given 1-year or 5-year plan. Implementing all actions and funding requests should be required to satisfy this standard and NMFS should make this clear in a final BiOp.

We urge the NMFS to develop physical performance standards for habitat as quickly as possible. These standards are essential to provide the clear and convincing evidence that the agency would need to evaluate whether the species are recovering.

#### **4) Implementation of the RPA is too uncertain, in terms of action agency authorities and/or commitment of funds.**

*Solution: The BiOp should include only those actions that the action agencies can implement under their various authorities and to which they can commit identified funds.*

#### Prioritization of strategies.

NMFS has not yet described how available funds will be prioritized by geographic area or the type of activity.

The BiOp appears ready to sell the idea of the "fast start" approach in funding activities in three sub-basins per year of the 16 high priority sub-basins. It is likely, at best, that by year 2005, several of these "priority" sub-basins will not have received funding. The final BiOp should be clear as to which of the sub-basins will be funded in what year, how much money will be received for each of the sub-basins and what this money will be used for. Only from this level of information can we assess if recovery efforts are adequate to mitigate the "jeopardy" call.

#### Authority over private lands and "reasonable progress"

In an earlier report, the ICBEMP recognized that federal land management alone would not be sufficient to recover listed salmonids. What assurances can the NMFS provide that adequate money will be effectively spent on private lands, and who will have authority over this effort? How will all efforts and "reasonable progress" be accounted for?

Habitat restoration on private (or non-federal) lands is described as fast start with federal funding, but there is no assurance that the action agencies will be able to fund any work on non-federal lands before 2002. The RPA expressly relies upon measures to be taken by entities that are not involved in this consultation to mitigate the impacts of the hydro system down to a level that will not cause jeopardy. Without the authority to require non-consulting entities to implement other measures through the RPA, NMFS cannot assume that they will occur. NMFS may not rely on the speculative actions of entities other than the action agencies to conclude that its RPA avoids jeopardy.

Many tribes and agencies are already involved in State processes focused towards salmon recovery. Are the federal agencies proposing another level of regional prioritization and assessment, or will the federal efforts utilize ongoing State activities?

What level of effort will offset the hydro-system "take"?

There is no guarantee that the offsite mitigation measures described in the Draft BiOp and the RPA, even if fully implemented, will provide the benefits that NMFS assumes. The RPA with these favorable assumptions still comes up short, yet NMFS speculates that other measures identified in the All-H paper will make up the remaining gap. There is no feasibility analysis supporting that speculation. Instead of taking a cautious approach to this uncertainty, NMFS opts for an RPA that is less risky for the hydro system and much more risky for the species.

Are we assured that progress can be made in the next year or two, as suggested in the document? The draft's current standards are too vague, too weak, or simply inadequate to provide listed salmonids with adequate protections. Implementing all actions and funding requests should be required to satisfy this standard, and NMFS should make this clear in a final BiOp. Rigorous evaluations of progress toward RPA objectives should include more serious consequences for failures to meet standards. For example, if the action agencies fail to meet obligations in the BiOp and RPA, serious consequences should be triggered, such as condemnation of water to meet main-stem and tributary flow requirements or further land and water use restrictions. Tough consequences such as these would provide incentive for the action agencies and the political powers that be to ensure the action agencies make progress toward recovering salmon within the first three years.

**5) The BiOp represents an unfair allocation of the conservation burden.**

*Solution: Treaty case law requires that all other actions that can be taken must be taken before imposing involuntary restrictions on treaty fisheries. NMFS must insure that the habitat and hydro components share an equal conservation burden.*

Treaty case law developed in *United States v Oregon* and *United States v Washington*, among other cases, specify that treaty fisheries cannot be restricted involuntarily unless all other actions that can be taken to prevent the restriction have been taken. The BiOp stipulates that operation of the federal hydro-system jeopardizes the continued existence of species listed under the ESA. The list of actions presented in the RPA to offset acknowledged hydro-system related mortalities consists largely of measures that are voluntary, uncertain in terms of the jurisdictional authorities needed to implement them, uncertain in terms of effectiveness, and uncertain in terms of the commitment of funds to implement them. These problems are discussed in detail in Issue Statements 1-3 above.

Contrasted against this uncertainty on the hydro and habitat side of the ledger is the certainty expressed in the BiOp that treaty and non-treaty fisheries will be held to existing or lower levels of harvest unless selective fisheries are implemented. To impose clear and certain restrictions on treaty fisheries while allowing voluntary, uncertain, and un-funded measures to mitigate for known impacts of the hydro-system represents an improper allocation of the conservation burden. The list of actions that can be taken, but are not required in the BiOp, makes it clear that NMFS proposes that treaty fisheries take an unfair share of the conservation burden.

- The use of hatcheries to supplement natural stocks rather than selective fisheries is one action that can be taken to offset or mediate the hydro-system mortalities that, in large part, force the treaty fishery restrictions suggested by NMFS. NMFS has chosen not to require the action agencies to fund widespread hatchery reform in the RPA.
- The reliance on voluntary or uncertain actions by federal habitat managers to produce survival improvements that offset or mediate hydro-system mortalities provides no assurance of real gains in salmon survival. To the extent that treaty fisheries are "held hostage" to real and measurable increases in salmon abundance, failure by NMFS to require explicit actions and assurances of funding by the federal managers discriminates against treaty fisheries that are held to certain and measurable harvest limits.
- Failure to implement structural and operational improvements at the hydro projects to increase passage survival amounts to passing the burden of recovery to the other Hs, including treaty fisheries. Passage improvements that increase salmon survival reduce the need to impose involuntary restrictions on treaty fisheries. NMFS' insistence on treaty fishery restrictions is discriminatory and burdens treaty fisheries with an unfair share of the conservation burden.

**6) Harvest and hatchery measures as presented in the BiOp and RPA should not be credited against the hydro-system jeopardy ruling.**

*Solution: Selective fisheries should not be credited as conservation tools, nor should funding hatcheries not managed to increase natural stock spawning.*

The BiOp and RPA emphasize the use of selective fisheries, funded primarily by BPA's Fish and Wildlife Program, to partially offset hydro-system mortalities to listed and non-listed salmon. The concept of selective fisheries is that all fish are captured alive, and abundant hatchery fish can be retained while listed wild fish are released "unharmful."

Experience shows that the survival benefits of selective fisheries are greatly exaggerated. After two decades of selective fisheries for steelhead, wild steelhead were among the first stocks listed at the most critical level of listing under the ESA. Until we understand why wild steelhead populations did not increase under selective fisheries management, it makes no sense to conclude that other listed populations will benefit.

Selective fisheries represent not a wild stock enhancement tool, but a fishery enhancement tool. The justification for selective fisheries is to provide some fishing opportunity on abundant, non-listed hatchery stocks that are mixed together with wild listed stocks. Accordingly, the hydro-system "action agencies" should get no credit for implementing selective fisheries.

The emphasis on selective fishery management in the RPA also will lead to misguided hatchery management policies that are designed to support selective fisheries rather than contribute to rebuilding natural stocks. Selective fisheries have been promoted, in part, as a way to justify continued funding of the state and federal hatchery systems. Political pressure and funding mandates will ensure that hatcheries are used to provide harvest benefits in selective fisheries. State and federal hatcheries that are managed for this purpose will not be used for natural stock supplementation. Such hatchery management represents a fishery enhancement measure, not a stock recovery measure. The hydro-system action agencies should get no credit for funding hatcheries that are not used to supplement natural stock productivity.

Hatchery practices should be reformed so that hatcheries produce fish that are suitable for spawning in the wild, as the Yakama Nation is doing at the Cle Elum hatchery.

The following are detailed comments specific towards harvest, hatchery and production concerns:

1. P. 4-2, sec. 4.1.1.6: There is a curious statement here and elsewhere in the document under "Population Trends and Risks" that appears to draw an inverse correlation between extinction risk of listed wild populations and the spawning effectiveness of hatchery fish. As written, the statement that wild fish are doomed to extinction if hatchery fish are equally effective in natural production areas seems nonsensical, since high effectiveness of hatchery origin fish should be a desirable condition and basis for recovery planning. NMFS appears to be looking past a very obvious tool for recovery and instead naming it as a serious extinction threat. This is perverse logic. At the least, these statements should be reworded to explain that the "extinction threat" is genetic only, not demographic.

2. P.4-6, sec. 4.1.3.5: Here and elsewhere the discussion of hatchery influences is almost exclusively negative and almost exclusively genetic. This is a deliberate attempt to discount the use of hatcheries in a recovery strategy. Frequently repeated is NMFS' dogmatic warning that interbreeding between hatchery and wild fish can only be negative and will threaten the existence of wild populations. NMFS' biased reporting of hatchery effects fails to mention the impressive demographic benefits enjoyed by hatchery fish in comparison to wild populations left to their own devices. NMFS should not condemn the hatchery technology because of past hatchery practices. Hatchery practices can and must be reformed as a central piece of a recovery strategy to produce fish that are suitable for rebuilding natural stocks.

3. P.5-8, sec. 5.3.4: This is a generally fair description of harvest impacts, but there is an opportunity to clarify the relationship between stock productivity and harvest, or "over-harvest" as the case may be, which continues to confuse the general public. It should be noted in the last paragraph on P. 5-8 that exploitation rates on the upriver bright fall chinook population have exceeded 70% in recent decades, yet this wild stock remains highly productive because it spawns and rears in healthy, relatively undeveloped habitats on the Hanford Reach. This concept is touched on in the last paragraph of P. 5-9, but could be enhanced by noting that the point at which harvest becomes over-harvest is dependent not so much on harvest management as on the productivity of the harvested stock, and this is based largely on habitat quality.

4. P.6-86, sec. 6.3.3. 1: The next-to-last paragraph indicates that NMFS expects fall chinook harvest rates will remain at current low levels. The current in-river harvest rate ceiling is 31.3%, whereas the All-H paper indicates the fall chinook harvest rate should be reduced to aid in recovery and to avoid breaching the lower Snake dams. Which position should we accept as NMFS' true position? On what scientific

foundation should we accept that either position is "reasonable and necessary for the conservation of the resource?"

5. P.6-105, first paragraph: Another odd statement that reveals NMFS' bias against hatchery intervention for recovery: *"The estimated productivity of wild fish increases with decreases in the assumed effectiveness of hatchery spawning in the wild."* Statements of this kind confirm that NMFS' institutional thinking prevents it from objectively assessing the potential for using the hatchery system as a tool in recovery. The models into which this assumption is quantified should also assess the survival benefits of early rearing in the hatchery for wild stocks to produce a fair and complete comparison of hatchery effects on wild population productivity.

6. P.9-10, Table 9.2-2: The table appears to show that the hydro-system, with all proposed actions in place at some time within 10 years, will be permitted to harvest over 43% of the listed Snake River spring/summer chinook population, 86% of the fall chinook population, 44% of the Upper Columbia spring chinook, and similar levels of steelhead. Meanwhile, treaty-reserved fisheries are being held to involuntary restrictions at harvest levels that are small fractions of these rates. This is a clear showing of the unfair allocation of the conservation burden to treaty fisheries.

7. P.9-31, sec. 9.5.2.7: A primary failure of fish and wildlife planning in the Columbia Basin has been failing to link up the management authorities represented in *US. v Oregon* with the funding sources controlled by the Power Council and BPA. This proposed Action would further distance those entities with decision-making authorities from the *de facto* management actions dictated by funding decisions. None of the Action Agencies are authorized or delegated by state or federal law to manage fish and wildlife resources. The Northwest Power Act of 1980 directed the BPA and the Northwest Power Planning Council - two of the Action Agencies - to give "high deference" to the technical and policy guidance of state and tribal fishery co-managers in developing plans to rebuild salmon resources. These Action Agencies did follow that guidance, despite further direction from the 9th Federal District Court of Appeals. This Action would have the effect of placing the Independent Scientific Review Panel, which is nothing more than an advisory body to the Power Council, in the position of determining the allocation of funds to implement recovery actions. The Yakama Nation is strongly committed to the *US. v. Oregon* process as their forum for authorized managers to conduct fish and wildlife management planning.

8. P.9-115, sec. 9.6.3. - Overview of Harvest Measures: This section forthrightly acknowledges that the FCRPS is transferring the burden of recovery to the harvest community in the form of further involuntary restrictions on harvest to compensate for unmitigated hydro-system harvest. In the case of treaty-reserved fisheries, this is an unfair allocation of the conservation burden and is improper under treaty fishing case law principles. Treaty fisheries should be exempted from restrictions that are designed to allow the FCRPS to continue harvesting 40%-80% of listed species. To do otherwise is to impose discriminatory restrictions on treaty fisheries by avoiding the set of other human-caused mortalities that form the cause and solution of the recovery problem.

The problem of unfairly burdening treaty fisheries with improper restrictions is best resolved by including treaty harvests as part of the environmental baseline for assessing the effects of various proposed recovery actions. To be consistent with case law standards, the federal parties must commit to ensuring that tribal harvests can occur on a priority basis with respect to other human-caused sources of mortality. Further,

NMFS must show that proposed actions in the BiOp and the RPA will produce reductions in mortalities among the other Hs that allow tribal fisheries to continue and listed populations to rebuild.

9. P.9-116, sec. 9.6.3.2: All of these proposed actions focus on selective fishery management or reduction in harvest effort. The Yakama Nation is on record as opposing the concept of selective fisheries as a conservation tool. The Action Agencies most certainly should not receive mitigation credit for funding the transition to selective fisheries, given that the available evidence clearly shows that selective fishery management has not been effective in recovering critical stocks. At best, selective fishery management is a fishery enhancement tool that provides justification for continued funding of state and federal hatchery systems. This is not mitigation for mortalities in the FCRPS, and the Action Agencies should get no credit for it.

Reliance on selective fisheries also will drive hatchery management policies in the wrong direction with respect to rebuilding natural and listed populations. It is inevitable, unless NMFS imposes restrictions otherwise, that political pressure and funding mandates will force many or most hatcheries to be used for selective fishery enhancement rather than natural stock rebuilding. It is naive or misleading to assume otherwise. Hatcheries used for such purpose, as many in the state system currently are, should receive no federal funding, no mitigation funding, and no mitigation credit for the FCRPS. The Yakama Nation must see firm and binding guidelines for the use of hatcheries as rebuilding tools before there can be serious consideration of support for the selective fishery approach.

10. P.9-120, sec. 9.6.4: NMFS should commit to not only reforming federal hatchery management practices, but to aggressive use of reformed hatcheries to accelerate the pace of recovery. NMFS' *Draft Basin-wide Salmon Recovery Strategy*, which serves as the basis for the RPA in this BiOp, suggests that "safety-net" supplementation should be reserved for a very limited set of circumstances where there is imminent risk of extinction. The hatchery system should be used to compensate for and offset the mortality load imposed by the FCRPS on all upriver stocks, not just those in danger of extinction.

The following comments relate to measures in the *Draft Basin-wide Salmon Recovery Strategy* as they relate to the RPA:

a. Vol. 2, Part B, p.52 discusses "NEPA exemption for any intervention not requiring construction of permanent hatchery rearing facilities..." This implies that capital construction projects will undergo long, expensive, and intense public review processes that may have uncertain outcomes. To the extent that each NEPA process is uncertain in terms of needed permissions and funding authorizations, capital projects subject to NEPA review should not be relied upon to mitigate for certain and quantifiable hydrosystem mortalities. Incidentally, our experience is that BPA will not exempt any federal expenditure from NEPA review, capital project or not.

b. Part C, p.52 states that annual O&M plus M&E will cost about \$550K per intervention. Considering the added cost of reforming hatchery practices to conform to APR guidelines, this cost should be closer to \$750K-\$800K. There is further discussion of implementing 15 projects over the first 3 years in the Snake Basin *alone* costing \$150M in capital and \$8.25M in additional costs (which is likely too low). Funds for these projects are not identified, nor is there any certainty that Congress will appropriate them to USACE budgets.

c. P.53, the performance objectives for federal mitigation hatcheries virtually rule out the 1" f hatcheries for recovery. It is clear that these standards are based on the preconception that hatcheries will not produce fish that are compatible with natural stock restoration. This is a misuse of the federal hatchery system that results in fish production that contributes nothing toward rebuilding. Federal hatchery practices should integrate the survival benefits of hatchery rearing with the survival needs of wild populations. Hatchery production should be viewed as an adjunct to natural production such that there is no distinction between the hatchery and natural components of the population, and average population productivity (hatchery+natural) increases as a result of the survival benefits of early hatchery rearing. Under this scenario, hatchery-reared progeny of natural-origin parents are returned to the natural population as smolts from acclimated release sites in natural production areas.

The straying standards of 5% for non-ESU fish into a natural population will ensure that successful supplementation programs are restricted or eliminated if program adults stray into small natural populations at natural stray rates. For example, a supplementation program that produces 10,000 returning adults may shed 5% (500) of those adults to adjacent streams. If the natural population in an adjacent stream is 100 individuals, then no more than 5 supplementation fish are allowed to stray into that population. As we have seen, NMFS' response to such an event is to reduce the supplementation program, effectively requiring that all recovery efforts are scaled to the "lowest common denominator. Given the potential consequences to the pace of recovery, NMFS is obligated to display more than arbitrary values of 5% for "non-ESU" strays and 5-30% for hatchery-origin fish within the ESU.

d. P.54: The extensive discussion on negative effects of rearing salmon in hatcheries. Most of the cited literature represents "scare tactics" and provides a litany of how not to operate hatcheries based on the wisdom of hindsight. In fairness it should be noted that hatcheries were never called upon to produce fish that are viable in nature, and in some notorious cases hatchery policy directed just the opposite. It is unhelpful to condemn the hatchery technology because of past practices. To do so is to risk throwing the baby out with the bathwater. Hatchery practices can and must be reformed so that the survival benefits of hatchery rearing contribute to recovery of natural populations.

After reading this section, one wonders at NMFS' justification of captive rearing as the latest and greatest recovery tool. Given the potential for domestication, inbreeding, and all the rest, it seems logical to conclude that captive rearing programs intensify these negatives on valuable wild broodstock.

e. Pp. 57-69: The tables that summarize qualitative benefits of proposed hatchery actions is basically a self-evaluation of the "Fed-I Plan" that was rejected in recent negotiations of the parties to U.S. v Oregon. It is not clear in the tables what qualitative criteria were used or how they were chosen. The assessment of benefits is likely quite different among the various fish management entities. On page 62, it is odd that the Methow supplementation program is rated lower than the Chiwawa program, even though the Methow program regularly meets program goals while the Chiwawa program has never exceeded 50% of its goal. NMFS appears to be biased in its use of criteria for rating program quality. Similarly, on page 63 the Wenatchee steelhead enhancement program is rated lower than that in the Okanogan and Methow watersheds, for unknowable reasons. The Wenatchee watershed has much higher potential for success in terms of broodstock collection capability, acclimation sites, habitat condition, and number of mainstem dams.

11. P.9-121, sec. 9.6.4.1: Many of the reforms called for in this section are consistent with reforms supported by the tribes in recent years. While there is much agreement in this area, the tribes see little action to implement these reforms. If all hatcheries were required to operate according to most of the conditions listed in this section, natural populations would be considerably farther down the path to recovery. It is recognized that full recovery and delisting will not be completed by releasing more hatchery-produced fish in natural production areas, regardless of ancestry. Only habitat improvements will provide the productive conditions needed to restore "self-sustaining populations in their natural habitats." Until habitats are capable of meeting this standard, large-scale supplementation of natural populations through appropriate hatchery intervention presents the best opportunity to increase stock productivity, build natural escapements, and provide modest harvest benefits as required under treaties with affected tribes.

12. P.9-123, sec. 9.6.4.2: This section appears to reserve hatchery intervention to only those circumstances where extinction is imminent. This is overly restrictive. Well-run hatcheries using proper culture techniques and practices should be utilized to support an aggressive program to restore stock productivity to all natural populations. Natural and hatchery populations should be indistinguishable as two components of the same population. The survival benefits of hatchery rearing can be distributed through the aggregate (hatchery+natural) population by careful broodstock collection, alteration of generations in the hatchery, and other known improvements in hatchery practices. The hatchery benefits are expressed as an increased average rate of productivity for the aggregate population.

13. P.9-124, sec. 9.6.4.3: The tribes expect to be an essential participant in all reviews of hatchery performance and studies on the performance of hatchery-reared salmon in natural environments.

## **7) NMFS should display a presumptive path to breaching of the Snake River Dams.**

*Solution: NMFS should continue to evaluate, in an aggressive and meaningful way, the feasibility and means for breaching the Snake River Dams over the next three years, so that if it is determined that the RPA cannot relieve the federal hydro-system of a 'Jeopardy ' call, then we will be in a position for dam removal.*

Snake River dam breaching - First, the Yakama Nation does not agree that the breach option should be deferred due to various "uncertainties". It is confusing to read (page 9-5) "...breaching the four lower Snake River dams would provide more certainty of long-term survival and recovery than would other actions".

Breaching must continue to be "aggressively" explored over the next five years and remain on the table until the Action Agencies can demonstrate clearly that mitigation within the habitat and hatchery components is working. In five years time we must either understand clearly that alternative recovery efforts are working or begin breaching these dams.

Assuming that all of the offsite mitigation measures in the RPA can be implemented, they will take a substantial amount of time to demonstrate what, if any, benefit they may have for listed species. This timeline could be longer than 10 years. As NMFS has noted, the hydro system is jeopardizing many Snake River runs now and will continue to do so if NMFS pursues non-breaching measures. The draft BiOp provides no explanation for how imperiled salmon will make it through the "bottleneck" created by the time it takes to implement these actions and the point at which the benefits, if any, are realized. This is a

significant factor that the final BiOp must evaluate. Waiting 10 years, hoping for speculative measures to produce scientifically untested and unproven benefits while listed species continue to slide toward extirpation is scientifically indefensible and, more importantly, contravenes the ESA's mandate.

The body of scientific evidence clearly illustrates that removal of the four lower Snake River dams is a necessary part of a larger strategy needed to protect and recover all species in the Columbia and Snake River Basin. That is, dam removal alone may not be a "silver bullet" but, the science plainly indicates that it is a necessary part of an overall strategy.

As such, the only biologically and legally defensible position for NMFS to take in a final BiOp is to call jeopardy on the federal hydro system and to require removal of the four lower Snake River dams in its RPA, with a possibility that dam removal need not be implemented if the action agencies can demonstrate, through clear and convincing objective evidence, that listed salmon and steelhead in the Snake River meet recovery standards. Anything less is simply unjustified by both science and law.

The Final Biological Opinion must be very clear in two specific areas:

- 1 . Section 9.1.8 states a "rigorous mid-point review of progress in 2005" and "a determination under certain conditions to pursue breach". Specifically, what will be included for consideration for the mid-point review? What are the elements considered in the "determination" and what is NMFS referring to by "certain conditions". It is essential to understand what NMFS considers to be specific triggers that would initiate specific additional or alternative actions. And, if a decision to breach was forthcoming, what would those timelines likely look like and what is the likelihood the required steps could be completed in the 6-year timeframe (based on the Army Corps' estimates). NMFS must provide this information from the onset so that there is less ambiguity later on.
2. Additionally, in Section 9.6.9.1 the Action states that NMFS will "seek appropriations to complete preliminary work on ... Snake River dams". Seeking appropriations is not an aggressive action, and it is not clear what constitutes preliminary work. Please, be very clear what work will be completed by 2005 and what work would need to be completed prior to a determination in 2008. Seeking funds is not the same as having funds. Without these funds, the motivation is diluted that would insure other components of the RPA are implemented in a timely manner.